

Southern Appalachian Creature Feature Podcasts

What is phenology and what is it more important now than ever?

Greetings and welcome to the Southern Appalachian Creature Feature.

We take for granted that each spring trees leaf out, flowers begin to bloom, birds return from their wintering grounds and animals come out of hibernation. What we often don't think about is the complex interplay between warming temperature, lengthening days, and plant and animal life cycles.

Each spring, bird migration is timed so the birds are ensured ample food for the journey – be it insects hatching from eggs or seeds ripening on plants. The flowering of plants is timed to ensure the appropriate pollinators are available to help create a new generation of plants. The study of the periodic life cycle events of plants and animals is called phenology, and its taking on a greater importance than ever before.

In biology, one of the great concerns about climate change is that this intricate interaction between species will get knocked out of whack by changes in temperature. In general, seasonal changes in plants are triggered largely by the amount of sunlight, while seasonal changes in animal behavior are influenced more by temperature.

Warmer temperatures brought on by climate change is triggering birds to begin their migration earlier, before the plants those birds depend on for food have emerged. Warmer temperatures may mean plants that rely on a specific insect for pollination are flowering after that insect has come and gone. Disruptions in these natural cycles could have dramatic impacts on the natural world.

For WNCW and the U.S. Fish & Wildlife Service, this is Gary Peeples.